

1 **In the Claims**

2 Claims 3, 6-8, 11-12, and 14-32 are canceled.

3 Claims 33-47 are new.

4 Claims 1-2, 4-5, 9-10, 13 and 33-47 are pending and are listed below:

5
6 1. (Original) A reactive filtration method, comprising continuously
7 regenerating a reactive filter media while simultaneously filtering contaminants
8 from fluid flowing through the filter media.

9
10 2. (Previously Presented) The method of claim 1, wherein regenerating
11 the reactive filter media comprises agitating a mixture of metal granules and the
12 filter media.

13
14 3. (Canceled).

15
16 4. (Original) A reactive filtration method, comprising continuously
17 regenerating a reactive filter media while simultaneously filtering contaminants
18 from waste water flowing through the filter media.

19
20 5. (Previously Presented) The method of claim 4, wherein regenerating
21 the reactive filter media comprises agitating a mixture of metal granules and the
22 filter media.

23
24 6. – 8. (Canceled).

1
2 9. (Original) A reactive filtration method, comprising continuously
3 regenerating an iron oxide coated sand bed while simultaneously filtering
4 contaminants from waste water flowing through the sand bed.
5

6 10. (Previously Presented) The method of claim 9, wherein regenerating
7 the sand bed comprises agitating a mixture of iron granules and sand.
8

9 11.-12. (Canceled).
10

11 13. (Original) A reactive filtration method, comprising passing waste
12 water through a moving mixture of sand and metal granules.
13

14 14.-32. (Canceled).
15

16 33. (New) The method of claim 1, wherein regenerating the reactive
17 filter media comprises agitating a mixture of the filter media and one or more of:

18 a metal salt reagent; and

19 an ionized metal reagent.
20

21 34. (New) The method of claim 4, wherein regenerating the reactive
22 filter media comprises agitating a mixture of the filter media and one or more of:

23 a metal salt reagent; and,

24 an ionized metal reagent.
25

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2 35. (New) The method of claim 9, wherein the continuously
3 regenerating comprises regenerating reactive surfaces on the iron oxide coated
4 sand bed to which contaminants can bond.
5

6 36. (New) The method of claim 9, wherein the filtering comprises
7 filtering solid forms of the contaminants and wherein the continuously
8 regenerating comprises regenerating reactive surfaces on the iron oxide coated
9 sand bed to which dissolved contaminants can bond.
10

11 37. (New) The method of claim 36, further comprising removing at least
12 a portion of the bonded and filtered contaminants from a vessel that defines the
13 sand bed.
14

15 38. (New) The method of claim 37, wherein the removing further
16 comprises removing the portion from a majority of the water.
17

18 39. (New) A method comprising continuously regenerating a reactive
19 filter media within a vessel while simultaneously filtering contaminants from fluid
20 flowing through the filter media effective to remove the contaminants from the
21 vessel and from a majority of the fluid.
22

23 40. (New) A method comprising filtering contaminants from fluid
24 flowing through a first portion of a reactive filter media, while agitating a second
25

1 portion of the reactive filter media to continuously regenerate the reactive filter
2 media.

3
4 41. (New) A method comprising continuously regenerating a filter
5 media by abrading the filter media sufficient to allow surface sites on the filter
6 media to be available for reacting with a chemical reagent, while simultaneously
7 filtering contaminants from fluid flowing through the filter media.

8
9 42. (New) The method of claim 41, wherein the abrading scours the
10 chemical reagent and compounds containing the reagent and the contaminants
11 from the filter media.

12
13 43. (New) The method of claim 41, further comprising introducing the
14 chemical reagent into the fluid.

15
16 44. (New) A method comprising:
17 flowing contaminated water through a filter chamber of reactive filter
18 media to generate a mixture;
19 agitating the mixture in a separator to separate contaminants from the
20 mixture and to regenerate the reactive filter media; and,
21 recycling the regenerated reactive filter media into the filter chamber.

1 45. (New) The method of claim 44, wherein the agitating exposes
2 surfaces of the reactive filter media and wherein the water contains a reagent that
3 bonds to the exposed surfaces in the filter chamber.
4

5 46. (New) A method comprising:
6 physically capturing contaminants from water with a filter media;
7 chemically capturing contaminants from the water with the filter media;
8 separating the captured contaminants from the filter media; and
9 recycling the separated filter media to capture additional contaminants.
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11 47. (New) The method of claim 46, wherein the separating further
12 comprises separating the captured contaminants from a majority of the water.
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